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Docket Management Facility US Department of Transportation 400 Seventh Street, SW Nassif Building PL-401 Washington, DC 20590-0001 Fax: 202-493-2251

Subject: Comments and Request for Clarification RSPA-04-19886 (HM-224E)

Prohibition of Primary Lithium Batteries and Cells on Passenger Aircraft

## Dear Sir or Madam:

Honeywell respectfully submits the following comments in response to the Interim Final Rule published on December 15, 2004 and referenced above. Please feel free to contact Honeywell for any additional information or clarification on any of the points presented herein. Your consideration of our comments is appreciated.

Honeywell is a diversified company engaged in the manufacture, assembly, repair & overhaul and servicing of various aircraft equipment and components. Many of these items, such as flight management and flight navigation computers, emergency beacon transmitters, and other equipment necessary to ensure the safe normal operation of commercial aircraft contain lithium batteries. Honeywell also provides various lithium containing equipment to the US defense community. Program display generators used in the F-16 fighter jets, for instance are supplied by and serviced by Honeywell. In most cases the equipment can be shipped with the lithium batteries installed but there are also several instances where the lithium batteries must be shipped separately.

The Interim Final Rule (IFR) published on December 15<sup>th</sup> contains numerous inconsistencies in language between the Preamble and the List of Subjects. As the wording exists in the IFR pages 75215 – 75216 Honeywell believes this will have a significant negative impact on our ability to meet customer demands. Prohibiting primary lithium batteries and equipment containing these batteries from passenger aircraft will require us to ship everything via cargo air. This will significantly delay delivery, which is in most cases an urgent "Aircraft on Ground (AOG)" situation. This delay will in turn cause many commercial passenger jets to remain grounded while they wait for parts to arrive. In most cases, the very passenger planes that are forbidden to carry this lithium battery containing equipment as freight will end up with that equipment either installed in the aircraft or carried as "spares" by the aircraft operator.

The inconsistencies in the IFR must be resolved and the restrictions on precisely which lithium batteries are forbidden on passenger aircraft, must be clarified. We ask that the following specific inconsistencies be addressed immediately:

 Special Provision A102 and A104 (Lithium batteries contained in equipment UN3091) specify criteria whereby this equipment could be transported aboard passenger aircraft. A102 includes the language "net weight of the package does not exceed 5 kg". A104 includes the language "packages that do not exceed a net weight of 5 kg"

Honeywell suggests that the word "package" be changed to "lithium batteries" in these special provisions be changed for clarification. 49 CFR 171.8 does not contain a definition of "net weight" but does state a "package" is "a packaging plus its contents" which in the case of A102 and A104 would refer to the equipment and the lithium battery contained within it. This means that the equipment plus battery would need to weigh less than 5 kg in order to be transported on a passenger aircraft. Using this interpretation relatively heavy pieces of equipment such as those described on page 1 containing small lithium batteries would be prohibited on passenger flights while small or lighter equipment containing much larger and potentially more dangerous lithium batteries would be permitted. The Preamble suggests that RSPA had no intention of regulating small lithium batteries contained in equipment. We therefore request that the wording be changed to make it clear that the 5 kg weight restriction applies only to the batteries and not to the equipment or to the weight of the package.

2. Special Provision A101 and A103 (Lithium batteries packed with equipment UN3091) specify criteria whereby these batteries and equipment could be transported aboard passenger aircraft. A101 includes the language "the gross weight of the package does not exceed 5 kg". A103 includes the language "packages that do not exceed a gross weight of 5 kg"

Honeywell suggests that the word "gross weight" be changed to "gross weight of lithium batteries" for many of the same reasons cited above. The potential risk with these shipments stems from the separate lithium batteries and not the equipment with which they are packed. Risk is neither increased nor decreased based on the weight of the equipment but rather on the weight or perhaps number of lithium batteries packed with the equipment. By specifying gross weight of the package many critical shipments of aerospace equipment, lifesaving and emergency devices and even some consumer electronics such as desktop computers (supplied with a spare secondary lithium battery) will be prohibited from being shipped on passenger flights even though these batteries may be very small and pose a very small risk. The Preamble suggests that RSPA had no intention of regulating small lithium batteries packed with equipment. We therefore request that the wording be changed to make it clear that the 5 kg weight restriction applies only to the batteries and not to the gross weight of the package.

3. Honeywell has a specific question on the wording in 173.185 (b)(5) and (c)(4). which states that "The outside of each package that contains a primary (non-rechargeable) lithium battery or cell must be marked "PRIMARY LITHIUM BATTERIES – FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT". Does this apply to ALL packages that contain primary lithium batteries including packages that contain equipment packed with or containing lithium batteries?

If the marking does not apply to equipment containing primary lithium batteries please change the wording to make this clearer.

4. 173.185 (b) and (c) include the statement "Except for primary (non-rechargeable) lithium batteries and cells transported aboard passenger carrying aircraft, cells and batteries are not subject to any other requirements of this subchapter if they meet the following" which goes on to include the various exception criteria previously included in this section.

This sentence is confusing. Please add the phrase "in accordance with special provision A101 or A102" after the phrase "passenger carrying aircraft" to make it clear that this refers to primary lithium batteries contained in or packed with equipment.

5. Special provisions A100 forbids SECONDARY batteries in packages with a gross weight of 5 kg from being shipped on passenger aircraft yet RSPA has provided no options to shippers for communicating this restriction.

It is possible to have a package of secondary lithium batteries that meets all the exception criteria in either 173.185 (b) or (c) but which weighs over 5 kg. The package would therefore be "excepted" but "prohibited" on passenger planes at the same time. How is a shipper supposed to communicate this restriction? RSPA has provided the new statement "PRIMARY LITHIUM BATTERIES ..." but this would not be technically appropriate for a package containing SECONDARY lithium batteries. Honeywell suggests the wording of the new marking be changed to "LITHIUM BATTERIES – CARGO AIRCRAFT ONLY" which not only addresses both types of batteries prohibited under A100 but also is shorter, more clear, and consistent in approach with the already well understood verbiage in the ICAO Technical Instructions and the IATA Dangerous Goods Regulations.

6. 172.402(c) currently requires packages containing hazardous materials forbidden on passenger aircraft to be labeled with the orange and black rectangular "Cargo Aircraft Only" label specified in 172.448. Does this mean that excepted packages marked as required by the new 173.185(b)(5) and (c)(4) have to also be labeled with the Cargo Aircraft Only label if offered for or transported by air?

Honeywell believe that excepted packages under 173.185(b) and (c) are "not subject to any other requirements of this subchapter" which includes the requirement to use the Cargo Aircraft Only label. Please confirm this position.

- 7. Does the new marking in 173.185(b)(5) and (c)(4) apply to lithium batteries that are shipped as hazardous waste?
- 8. Do the exceptions in 175.10(a)(2) still apply to equipment containing primary lithium batteries or primary lithium batteries required aboard an aircraft in accordance with an airworthiness requirement or operating regulation? If the exceptions do apply, is this only for air operators or do the exceptions apply also to the suppliers offering the batteries and equipment for shipment to the air operator?

Honeywell appreciates the opportunity to comment and looks forward to a response on our request for clarification. If you require any additional information or would like to discuss any of our comments in more detail, please contact me.

Sincerely,

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